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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/804,293	03/13/2001	Tadahiro Nakao	KPC-289	9278

7590 04/10/2003
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EXAMINER

SELLERS, ROBERT E

ART UNIT	PAPER NUMBER
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1712

15

DATE MAILED: 04/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/804,293	Applicant(s) NAKAO ET AL.	
	Examiner Robert Sellers	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-20 is/are pending in the application.
- 4a) Of the above claim(s) 16-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5 and 10</u> . | 6) <input type="checkbox"/> Other: _____ |

Claims 16-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 11.

The elections of the epoxy group-containing vinyl copolymer (a), fatty acid (b) and isocyanate group-possessing compound (c) in the amendment filed March 13, 2003 (Paper No. 14) completes the election of species.

The translations in Appendix II of the amendment filed March 13, 2003 for Japanese foreign priority no. 2000-075653 establishes the support for the production examples, examples and comparative examples of the specification questioned on pages 2-4 of the previous Office action.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

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Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The NCO:OH equivalent ratio ranges described on page 9, lines 24-25 and claim 15 are not clearly denoted in the absence of a denominator of 1 (e.g. 0.05:1 to 2.0:1 and 0.1:1 to 1.2:1). For example the language "0.5 to 2.0" could be misinterpreted as 0.5:2.0.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, 11, 13 and 15 are rejected under 35 U.S.C. 102(b) as anticipated by Saunders, Jr. et al.

Saunders, Jr. et al. (cols. 6-8, Example 1) shows a cold-setting (col. 8, lines 10-11) coating composition comprising the reaction of an epoxy group-containing vinyl copolymer derived from about 10-40% by weight of an epoxy group-containing monomer (col. 2, lines 38-40) and castor oil fatty acid (a species conforming to the iodine value of claim 13 according to page 7, lines 17-18) in an epoxy:acid equivalent ratio of from 0.1:1 to 0.9:1 (col. 2, lines 49-51). The resultant fatty acid-modified acrylic resin is then further reacted with a monoisocyanate or polyisocyanate in an NCO:OH equivalent ratio of from 1.2:1 to 6.7:1 (col. 2, line 56 to col. 3, line 6 wherein the ratio is converted from the disclosed OH:NCO parameters of from 0.15:1 to 0.85:1).

Claims 12 and 14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Saunders, Jr. et al.

Saunders, Jr. et al. does not mention the number average molecular weight and glass transition temperature of the vinyl copolymer as required in claim 12, nor the ratio of fatty acid:vinyl copolymer defined in claim 14.

Based on the equivalent epoxy group-containing vinyl copolymers reacted with the identical fatty acids, wherein the resultant fatty acid modified acrylic resin is further reacted with equivalent isocyanates, the disclosed epoxy:acid equivalent inherently encompasses the fatty acid:vinyl copolymer ratio of claim 14. The use of equivalent monomers including an equivalent amount of the identical glycidyl methacrylate monomer in the formation of the vinyl copolymer inherently indicates a number average molecular weight and glass transition temperature within the limits of claim 12.

The burden of proof is shifted to applicants to rebut the inherency according to *In re Fitzgerald*, 205 USPQ 594, CCPA 1980 and MPEP §§ 2112-2112.02.

Claims 10, 11, 13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent No. 6-49368.

The Japanese patent discloses a coating composition containing the reaction of an epoxy vinyl copolymer possessing a number average molecular weight of 7200 (page 8, col. 13, line 12) prepared from 5-25% by weight of epoxy vinyl monomer with a drying oil fatty acid having an iodine value of from 100-200 which is further reacted with a polyisocyanate in an NCO:OH equivalent ratio of from 0.1:1 to 1:1 (page 10, col. 9, line 12).

Claims 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent No. 6-49368.

The Japanese patent abstract does not mention the glass transition temperature of the vinyl copolymer as required in claim 12, nor the ratio of fatty acid:vinyl copolymer defined in claim 14.

Based on the equivalent epoxy group-containing vinyl copolymers with an equivalent number average molecular weight reacted with the identical fatty acids, wherein the resultant fatty acid modified acrylic resin is further reacted with equivalent isocyanates, the fatty acid:vinyl copolymer ratio of claim 14 is inherent in the amounts set forth and exemplified in the patent. The use of equivalent monomers including an equivalent amount of the identical glycidyl methacrylate monomer in the formation of the vinyl copolymer inherently indicates a glass transition temperature within the limits of claim 12.

The burden of proof is shifted to applicants to rebut the inherency according to *In re Fitzgerald*, 205 USPQ 594, CCPA 1980 and MPEP §§ 2112-2112.02.

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